Examiner: Mullis, Jeffrey C.; Art Unit: 1711

Amendment No. 1 -- Reply to Office Action of August 11, 2003

PATENT

Claims as Amended:

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The following is a complete listing of claims, replacing all prior listings of claims in the application:

- 1 Claim 1 (original): A method of forming an optical lens, the method comprising the steps of:
 - a) mixing together an optically clear dead polymer, a reactive plasticizer in an amount to render the composition semi-solid and malleable, and an initiator to form a semi-solid polymerizable composition, wherein the dead polymer and the reactive plasticizer exhibit compatibility at temperatures not higher than 100°C, and wherein the polymerizable composition remains optically clear and exhibits low shrinkage when polymerized;
 - b) shaping the semi-solid composition into a desired geometry; and
 - c) exposing the semi-solid composition to a source of polymerizing energy;
- 10 to give the resultantly optically clear lens comprising a crosslinked polymer network of reactive
- 11 plasticizer within an entangled dead polymer.
- 1 Claim 2 (original): A method according to claim 1 wherein the optically clear lens comprises a
- 2 semi-interpenetrating crosslinked polymer network of reactive plasticizer within an entangled
- 3 dead polymer.
- 1 Claim 3 (original): A method according to claim 2 wherein the polymer network of reactive
- 2 plasticizer is further crosslinked to the dead polymer.
- 1 Claim 4 (original): A method according to claim 1 wherein the optically clear lens comprises
- 2 interpenetrating reactive plasticizer polymeric chains within an entangled dead polymer.
- 1 Claim 5 (original): A method according to claim 1 wherein the optically clear lens is impact-
- 2 resistant.
- 1 Claim 6 (original): A method according to claim 1 wherein the optically clear lens exhibits high
- 2 fidelity replication.

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- 1 Claim 7 (original): A method according to claim 1 wherein the optically clear lens exhibits
- 2 dimensional stability.
- 1 Claim 8 (original): A method according to claim 1 wherein the optically clear lens is an
- 2 ophthalmic lens.
- 1 Claim 9 (original): A method according to claim 1 wherein the semi-solid composition is shaped
- 2 by placing the semi-solid composition in contact with a mold, the mold corresponding to the
- 3 desired geometry.
- 1 Claim 10 (original): A method according to claim 9 wherein the semi-solid is shaped by placing
- 2 it into about the center of the mold, such that shaping the semi-solid while optionally heating
- 3 causes the semi-solid composition to flow radially outward.
- 1 Claim 11 (original): A method according to claim 1 which further comprises the step of
- 2 providing a waiting period at a predetermined temperature after the composition is shaped and
- 3 before exposing to the source of polymerizing energy.
- 1 Claims 12-15 (canceled)
- 1 Claim 16 (currently amended): A method of forming a shaped article, the method comprising
- 2 the steps of:
- 3 <u>dissolving mixing together</u> a dead polymer[[,]] <u>and an initiator in</u> a reactive plasticizer in
- 4 an amount to render the composition semi-solid and malleable, and an initiator to form a [[semi-
- 5 solid]] polymerizable composition[[,]] which exhibits low shrinkage upon polymerization, said
- 6 reactive plasticizer being in an amount sufficient to render the composition semi-solid and
- 7 malleable;
- 8 forming the semi-solid composition into a pre-form;
- 9 providing a mold corresponding to a desired geometry;
- placing the pre-form into the mold;

11	compressing the mold, with optional heating, so that the semi-solid composition takes or the shape of the internal cavity of the mold, and exposing the semi-solid composition to a source of polymerizing energy, to give the
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14	resultant article.

- 1 'Claim 17 (original): A method according to claim 16 which further comprises the step of
- 2 providing a waiting period at a predetermined temperature after the pre-form is compressed and
- 3 before exposing to the source of polymerizing energy.
- 1 Claim 18 (original): A method according to claim 16 wherein the pre-form is placed in contact
- with the mold, such that shaping the mold solid while optionally heating causes the semi-solid
- 3 composition to flow radially outward.